

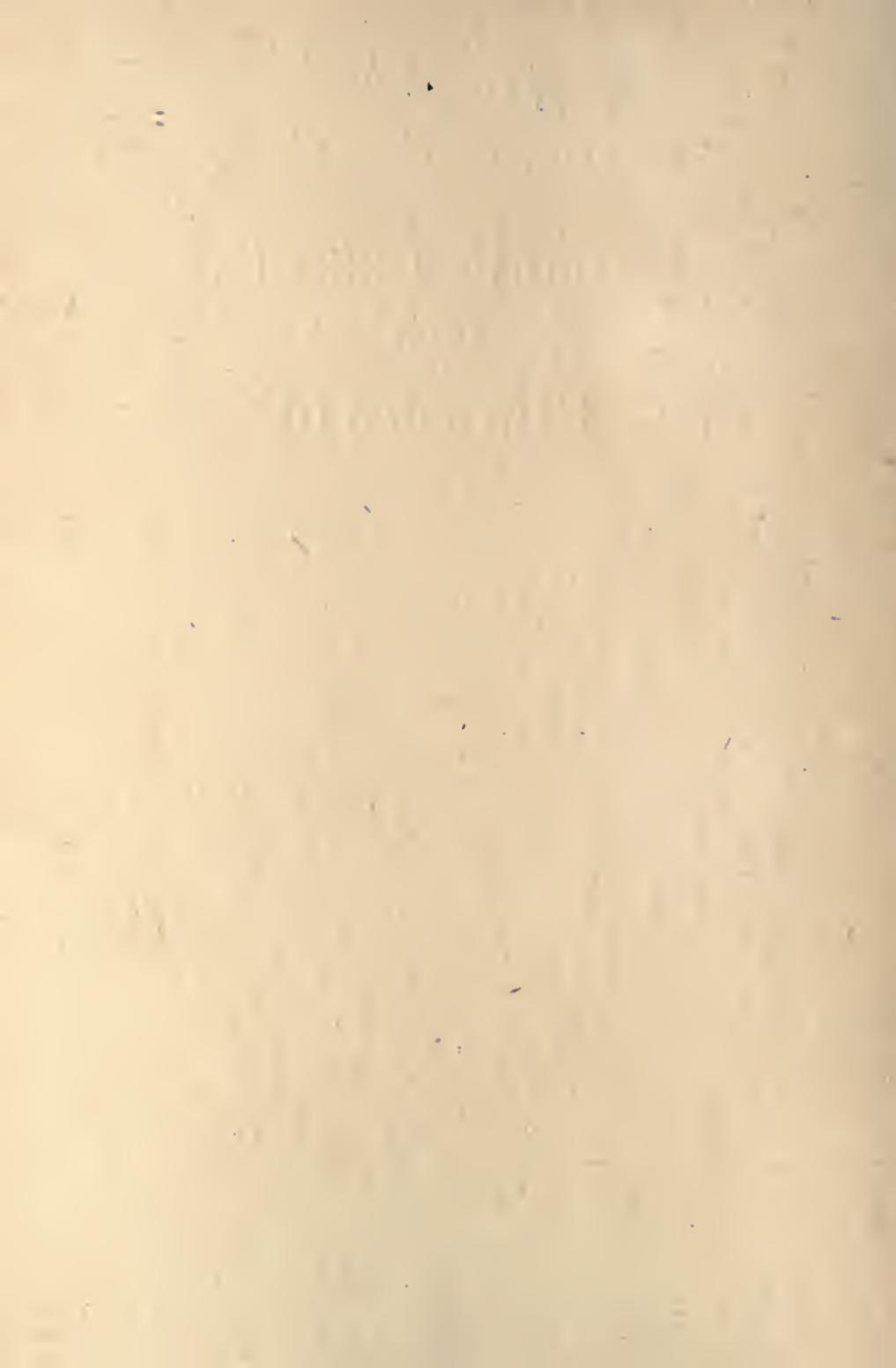
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Ludwig Bussler.
Harmonic Exercises
at the
Pianoforte

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Harmonic Exercises

at the

Pianoforte

for

Beginners and Advanced Pupils.

Forty-two Exercises

in

clear and simple arrangement

by

Ludwig Bussler.

New York: G. Schirmer
Boston: Boston Music Co.

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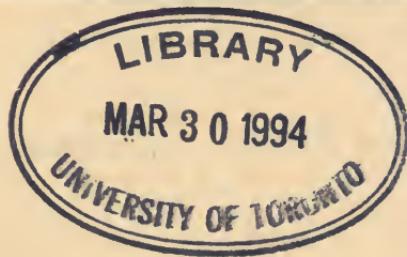


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Preface.

THE following exercises are intended to supplement and further pianoforte instruction by teaching the elements of harmony through a simple empirical method. Neither musical terminology as an essential, nor a systematic school-presentation, has been aimed at. The practical performance of the pupil at the instrument is the sole object of the course, which whenever possible is to rely upon the natural ear, and to be assisted, only where this latter is insufficient, by the merest external pedagogic aids.

These exercises thus serve to develop the musical sense, which experience proves to be far too easily slighted in piano-teaching.

Preliminary studies are not presupposed.

The exercises may be interrupted in any place, whenever the pupil exhibits either disinclination or lack of comprehension. Only a few minutes in each lesson should be devoted to them.

In Music-schools these exercises are suitable for a half-year (summer) piano-course, which may be interpolated between the Primary course and Practical Harmony, and (according to the author's experience) will afford the young musicians lively pleasure.

Thus employed the Exercises form a preparatory school, based on simple empiricism, to a practical course in Harmony based on a systematic method.

Ludwig Bussler.

Harmonic Exercises at the Pianoforte.

I. Major and Minor Chords.

§ 1.

C-MAJOR TRIAD.

In the very first piano-lessons the *C*-major triad



should be struck repeatedly. Derived from the fingering of the five-finger exercises by keys touched with the first, third and fifth fingers.

Its formation may be attempted simply by ear, after hearing it struck several times. But in the first lessons most pupils are too embarrassed to make such attempts.

This triad is called as such the **Chord of *C*-major**. The pupil must at all times be able to execute readily the command: Play the chord of *C*-major!

First Exercise.

Chord of *C*-major.

§ 2.

G-MAJOR TRIAD.

When the pupil can strike the *C*-major triad with perfect confidence he may form, at first by ear, the *G*-major triad.



If he cannot form it easily by ear, the fingering may again be called to his aid, the position of the keys being precisely the same as before. The chord so found is to be called the **Chord of G-major**.

Second Exercise.

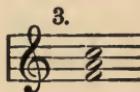
Chord of G-major.

N. B. Where pupils do not readily comprehend, care must be taken—here more than elsewhere—not to push forward. Keep rather to each exercise—all of which are to be treated as comparatively unimportant—until the pupil can master it with perfect ease.

§ 3.

F-MAJOR TRIAD.

The *F*-major triad is to be formed like the above:



in which, after the ear, positions of the piano-keys are the determining factor.

Third Exercise.

Chord of F-major.

§ 4.

ALL THE MAJOR TRIADS.

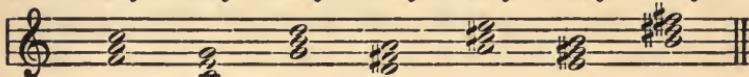
In the following exercise too the ear must first decide, i. e. the pupil should himself seek for the tones forming the Major triad.

Pupils who quickly succeed in this easiest of harmonic exercises, can be taught the further formation of chords before gaining a knowledge of the notes and names of the black keys. Others should acquire this knowledge before advancing.

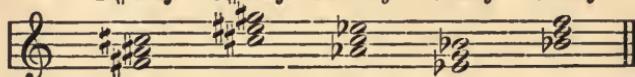
Fourth Exercise.

Construct, first on all white keys and then on all black ones, the Major Triads in the order

4. *F-maj. C-maj. G-maj. D-maj. A-maj. E-maj. B-maj.*



F♯-maj. C♯-maj. A♭-maj. E♭-maj. B♭-maj.



In case the ear should not suffice, according to the constant fingering 1, 3, 5.

The key-note (lowest note) is each time to be named or struck by the teacher.

This exercise is to be continued until the pupil is able at any time, in or out of the order, to strike any chord at once and correctly.

§ 5.

THE CIRCLE OF FIFTHS.

Let the teacher now call for the chords always in the order of the Circle of Fifths:

*G-maj. D-maj. A-maj. E-maj. B-maj. F♯-maj. C♯-maj.
(= D♭-maj.)*

D♭-maj. A♭-maj. E♭-maj. B♭-maj. F-maj. C-maj.

and call the pupil's attention (already accustomed to it by practice) to the interconnection by fifths of the key-notes.

Use to this end the mechanical aid, that the highest tone (fifth finger) of the foregoing chord becomes the lowest tone (first finger) of that following, finally allowing the pupil to construct the succession of chords by himself.



Fifth Exercise.

Construct the Major Triads of the Circle of Fifths.

Now show the pupil, that the last chord is the same as the first.

The series of chords therefore turns back to its source. Thus it is like a Circle.

We therefore have here a Circle of Chords.

This is called a Circle of Fifths because the key-notes of the successive chords are five tones (a Fifth) apart.

The pupil should keep to this exercise until thorough confidence and fluency are attained.

The exercise should also be played with both hands together.



§ 6.

CONSTRUCTION OF THE MINOR TRIAD.

The Minor Triad is formed from the Major Triad by lowering the Third—the tone of the third finger.

- (1) Try to construct minor chords by ear.
- (2) Construct the same from major chords by shifting third finger.

Sixth Exercise.

Construct. from *C*-major, *c*-minor.

from

7. *F*-major *f*-minor *E*-major *e*-minor *A*_b-major *ab*-minor

In like manner construct minor chord to every major chord.

§ 7.

MAJOR AND MINOR CHORDS IN THE CIRCLE OF FIFTHS.

Seventh Exercise.

Major and Minor Chords in the Circle of Fifths.

Let each major chord in the series of the Circle of Fifths be followed by the like-named minor chord.

8.

Later let the left hand accompany these chords in the lower octave. This exercise, closing a section, should be practiced by the pupil until he can execute it almost mechanically.

The minor chords alone must also be performed throughout the Circle of Fifths.

Advanced scholars, especially in class-teaching, should be made to do all exercises in writing as well, when this does not clash with the plan of instruction.

II. Figuration.

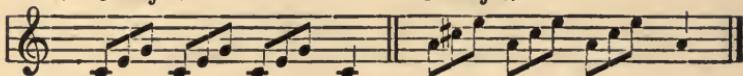
§ 8.

A chord is termed *figurated*, when its tones are not sounded together, but separately in succession.

Eighth Exercise.

Figurate the Major Chord ascending (i. e. from below to above).

9. C-major.

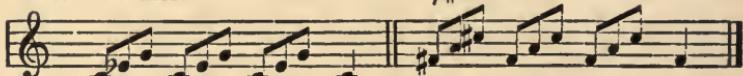


A-major.



Figurate the Minor Chord in like manner:

10. C-minor.



f#-minor.



*Always by heart! Only as shown by the teacher!
Left hand in the lower octave!*

Major and Minor Chords through the Circle of Fifths
In like manner:

11.



Left hand in the lower octave.

Figure the Chord ascending and descending:

12.

A musical score for 'The Star-Spangled Banner' on a staff. The first 16 measures are shown, starting with a treble clef, a key signature of one sharp (F#), and a common time signature. The melody consists of eighth and sixteenth note patterns.

In like manner throughout Circle of Fifths.

Abbreviated Figuration:

13. C-major c-minor

A musical staff in treble clef with four measures. Each measure contains a quarter note. The notes are grouped by vertical bar lines. The first measure has a sharp sign in the key signature. The second measure has a sharp sign in the key signature. The third measure has a sharp sign in the key signature. The fourth measure has a sharp sign in the key signature.

G-major

g-minor

etc.

In like manner throughout the Circle of Fifths.

The pupil should practice this exercise too until perfect confidence is gained.

§ 9.

SUBORDINATE EXERCISES

which may be omitted without disadvantage, should the course of instruction require it.

Ninth Exercise.

Figurate descending (from above to below) beginning with the *fifth* finger:

14. C-major



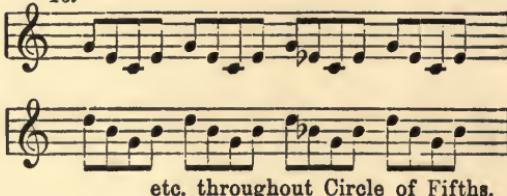
As above throughout Circle of Fifths.

15.



Figurate ascending and descending.

16.



This exercise will not be as easy for the pupils as it may appear at first glance; but like all Subordinate Exercises, it is not sufficiently important to hold back pupils who do not readily comprehend.

Other variations in figuration may here be shown to scholars of quick comprehension.

17.

But these already enter the department of finger-exercises to be constructed by the pupil independently, with which we have nothing to do.

Only a few pupils will easily succeed in reversing the order of the triads by heart, that is, to play them through the Circle of Fourths. The teacher must therefore usually omit this exercise. If it be taken up in rare cases, only Major Chords should be employed at first.

18.

Here the *lowest* tone always becomes the *highest* of the chord next-following, the tone of the first finger becoming the tone of the fifth finger.

The Minor chords follow in like manner:

19.

With successive Major and Minor chords the Minor chord comes first:

20.

But this exercise, as before remarked, is seldom so easily to be grasped by the pupils as should always be the case with all exercises here given.

III. Various Positions of the Chords.

§ 10.

THE FUNDAMENTAL CHORD AND ITS INVERSIONS.

Strike the Chord of *C*-major . Now place the first finger on *e*, the second on *g*, and take with the fifth the upper *c*, omitting the lower *c*: . We thus obtain the **second position** of the *C*-major chord, containing the same tones in different order.

If the teacher needs only to play, let this suffice.

Now, by beginning the succession of three tones with the third tone, *g*, taking it with the first finger, then *c* and *e* with the third and fifth fingers in succession, we obtain the **third position** of the triad:

21.

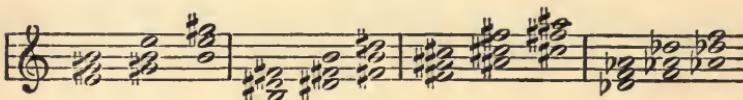
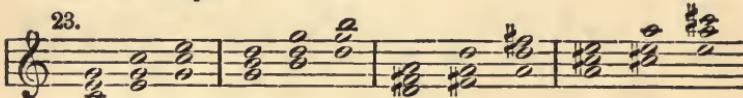
The three positions are therefore:

22.

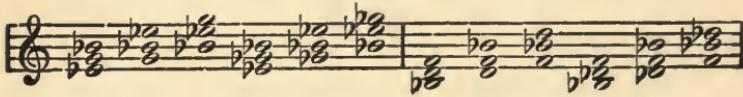
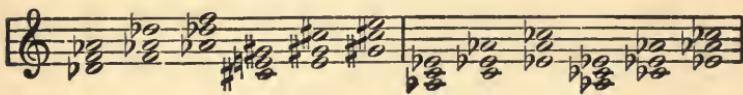
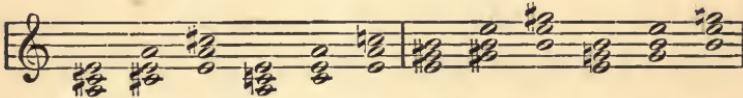
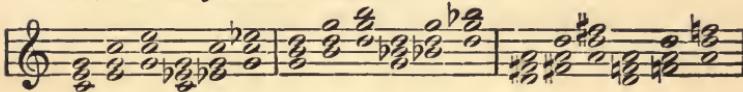
Tenth Exercise.

Construct the three positions of the Triad throughout the Circle of Fifths:

(1) in Major:



(2) in Major and Minor:



(3) in Minor:

The image shows three staves of musical notation in G minor. The first staff begins with a G minor chord (B-flat, D, F) in first position. The second staff begins with a G minor chord in second position (B-flat, D, G). The third staff begins with a G minor chord in third position (B-flat, D, G). The notation uses a treble clef and a key signature of one flat.

(4) out of regular order, when desired.

Subordinate. The second Position is called the *first Inversion*, the third Position the *second Inversion*. The first inversion is called the Chord of the Sixth; the second, Chord of the Fourth and Sixth.

IV. Fundamental Triads of the Key.

§ 11.

DOMINANT TRIAD.

Three successive major chords in the Circle of Fifths are the Fundamental Triads of the key of the middle triad.

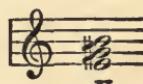
For instance
 are the fundamental triads of *C*-major.

The triad on the fifth degree is called, in its relation to the key, the Dominant triad. In the sign-notation it is indicated by a Roman V, and sometimes called "five" for short.

Eleventh Exercise.

Play Dominant Triads of various keys, for example:

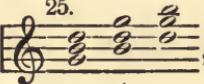
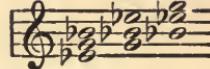
24.

of C-major:  of A-major: 

V

Dominant triads in all positions, for example:

25.

of C-major:  of A-flat-major: 

§ 12.

THE SUBDOMINANT TRIAD.

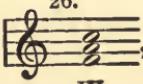
The triad on the fourth degree is called, in its relation to the key, the Subdominant Triad.

In musical sign-notation it is indicated by a Roman IV, and sometimes called "four" for short.

Twelfth Exercise.

Play Subdominant Triads of various keys, for example:

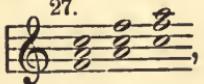
26.

of C-major:  of A-major: 

IV

The same in all positions, for example:

27.

of C-major:  of E-flat-major: 

Play Fundamental Triads of various Major Keys:

of A-major: 

IV I V

Likewise in the order I—IV—V or IV—V—I.

It will be seen, that these three chords embrace all seven tones of the scale.

REMARK (subordinate). The fundamental chords of the Minor keys do not stand next each other in the Circle of Fifths, one of them (the Dominant triad V) being a major triad. A key formed of three minor triads is an impossibility in [modern] musical logic.

§ 13.

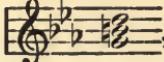
THE MINOR KEY.*

Thirteenth Exercise.

In Minor the V (Dominant triad) is a Major triad. We know ("Elements of Notation and Harmony", § 40 **) that in the harmonic Minor scale the seventh is raised. It thus forms a major third in the dominant triad.

Play Dominant Triads of Minor Keys, for example:

28.

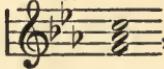
of *c*-minor: , of *a*-minor: 

Fourteenth Exercise.

In Minor the IV (Subdominant Triad) is a Minor chord. The minor sixth of the harmonic minor scale forms its minor third.

Play Subdominant Triads of Minor Keys, for example:

29.

of *c*-minor: , of *a*-minor: 

* Advanced pupils might be told, that key in the abstract sense is called Mode. [Translator's Note.]

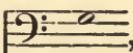
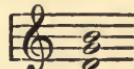
** By the same author, also published in English by G. Schirmer, New York. [Translator's Note.]

We can now see, that the chords were really not derived from the harmonic minor scale, but that the latter was formed from the chords. The course of teaching usually shows only the contrary (the key as derived from the scale), because the scales are first learned and practiced.

V. The Cadences.

§ 14.

THE TWO-CHORD CADENCE.

With the left hand strike the fundamental note of the Dominant triad in *C*-major , with the right hand the third position of the same ; then both together:



With the left hand play the fundamental note of the Tonic triad in *C*-major , with the right hand the second position of the same ; then both together:



We have thus obtained a *four-part* Dominant Triad and a *four-part* Tonic Triad: V—I,

The succession of these two triads forms the simplest Cadence, which is called, because consisting of 2 chords, a two-chord Cadence.

Fifteenth Exercise.

Form this Cadence, (1) in *C-major*:

32.



(2) In all keys of the Circle of Fifths:

33.

For learning to form these and the following Cadences many pupils need only to hear them played. Some can form the cadences more easily, when they are preceded by I.

34.

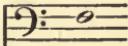
To prevent misunderstandings we give this formula I—V—I the (not quite appropriate) name of the three-chord Cadence.

Form this in all keys of the Circle of Fifths:

35.

§ 15.

THE FOUR-CHORD CADENCE.

With the left hand strike the fundamental note of the Dominant triad in *C*-major:  with the right the first position of the same: . Then strike both together:

36.

Set this chord between two tonic triads as above (No. 31):

37.

I IV I

This formula I—IV—I is called the Subdominant or Plagal Close.

If we set the Subdominant chord in this form between I and V of the three-chord cadence, we obtain the series

I—IV—V—I

or the four-chord Cadence.

38.

I IV V I

Sixteenth Exercise.

Form these, (1) in C-major:

(2) in all keys of the Circle of Fifths:

39.

§ 16.

THE FIVE-CHORD CADENCE.

On the sixth degree of every major key there is a minor triad:

This minor triad is the tonic chord of the relative minor key. [Relative major and minor keys are those having the same signature.] In the sign-notation it is indicated by a Roman VI.

Seventeenth Exercise.

**Form the triad on the sixth degree of all major keys
In the Circle of Fifths:**

Erect the same triad, in all its positions, in all keys:

42. C-major.

G-major.

D-major.

How was the tonic triad formed in our cadences?

43.

Answer:

Transpose Bass to the higher octave:

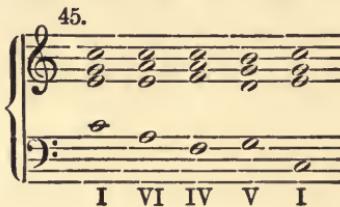
The above is to be followed by the triad on the sixth degree in such a way, that the common tones $c' - c''$ shall be held by the same fingers. To this end, take with the left hand the fundamental of triad VI as near as possible to the fundamental of the foregoing triad, *i.e.* a third lower:

Now with the right hand take the third position of triad VI: 

Then strike both together:



Set this chord VI between I and IV of the foregoing cadences. Thus we have the five-chord cadence:



Form this cadence in all keys of the Circle of Fifths:

46.

§ 17.

FIGURATION OF THE CADENCE.

The successive striking of the tones of a chord is called an Arpeggio, broken Chord, Figuration. (§ 8.)

The playing in succession of the tones of a chord is called: to figurate, to play arpeggios.

Eighteenth Exercise.

Figureate (1) the two-chord Cadence in all keys:

Play the tones from below upward, as eighth-notes.

47.

As a preparation the chords should first be struck in succession. (No. 32.)

(2) the three-chord Cadence ditto:

48.

(3) the four-chord etc.:

49.

(4) the five-chord etc.:

50.

§ 18.

TWO TO FIVE-CHORD CADENCE IN MINOR.

This § may be skipped entire, or kept until the last. It supplements § 13.

In minor the V is a major chord, the I and IV minor chords.

The positions of the chords, in both chords, are to be taken precisely as in major.

Nineteenth Exercise.

Erect accordingly (1) the V in all minor keys:

51. c g d a e b f[#].

c# g# d# = eb bb f

(2) the IV in all minor keys:

52. c g d a e b f[#]

(3) the two-chord Cadence V I in all minor keys:

53.

(4) the three-chord cadence I V I:

54.

(5) the plagal close I IV I:

55.

(6) the four-chord cadence I IV V I:

56.

(7) the five-chord cadence:

57.

(8) Figure the cadences in minor.

Example with the five-chord cadence in minor:

58.

The close lacking in these and other figurations can be added by a repeated (not figured) striking of the last chord.

VI. The Dissonances.

§ 19.

THE DIMINISHED TRIAD.

On the seventh degree of the key is situated the diminished Triad.—In C-major:

59.

It will be struck, for the purpose in hand, in all keys with the same fingers as the other triads, namely 1, 3, 5.

Twentieth Exercise.

Erect the diminished triad in all keys of the Circle of Fifths:

60.

The diminished triad is a *dissonant chord*, *i. e.* it must be *resolved*. The resolution takes place, in the fingering with the two free fingers 2 and 4.

Twenty-first Exercise.

Form the Diminished Triad, with resolution, in all major keys of the Circle of Fifths, taking the same fingering in all cases:

61.

In minor keys the diminished triad is the same as in the like-named major keys, in *C*-minor as in *C*-major, in *A*-minor as in *A*-major, etc. The fingering is consequently the same. But in the resolution the higher tone progresses a half-tone further down, the major third of the major key being replaced by the minor third of the minor key. *E. g.*

62. *c-minor* *g-minor* *f \sharp -minor*

Twenty-second Exercise.

Play the diminished triad, like the others, in three positions.

Form the three positions of the diminished triad in all keys:

63.

etc.

§ 20.

DOMINANT CHORD OF THE SEVENTH.

By adding above another Third to the dominant triad V we obtain a chord of the seventh, also called Dominant Chord of the Seventh.

64.

Twenty-third Exercise.

Form this chord of the seventh in all keys. Fingering: 1, 2, 3, 5. Here it is better (musically more reasonable) to progress through the Circle of Fourths rather than of Fifths. At first it is easier to name the *key* and *fundamental* of each chord of the seventh.

Thus: *C-major, G:*

65.

F-major, C:

Here too the formation of the chords should be assisted, as far as possible, by the ear, especially when seeking the fourth tone which completes the chord of the seventh. Below are the

Chords of the Seventh in the Circle of Fourths.

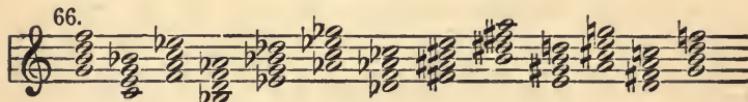


Figure the chord of the seventh throughout the Circle of Fourths, upward and downwards. (Compare Example No. 12, p. 7.)

§ 21.

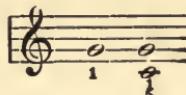
RESOLUTION OF THE CHORD OF THE SEVENTH.

The three highest tones in the chord of the seventh form the diminished triad.

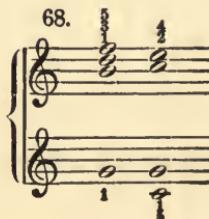
The right hand takes the diminished triad, and resolves it as above:



The left hand takes with the thumb the fundamental of the chord, and repeats it in the second chord with the addition of the fundamental of the triad, taken by the little finger:



Together:



Twenty-fourth Exercise.

Form accordingly Dominant chords of the seventh
in all keys, with resolution.

The fingering, which here serves as a guide, must always remain the same, whatever keys are to be struck.

69.

§ 22.

POSITIONS OF THE CHORD OF THE SEVENTH.

This chord having four tones, it has likewise four positions:

70.

figurated:

Twenty-fifth Exercise.

Play the Dominant chord of the seventh in all keys and positions.

The first position is called the *fundamental chord*; the following are the *first, second, and third inversions*.

71.

Play these positions also with two hands, and figurate them.

§ 23.

THE CHORD OF THE SEVENTH IN THE CADENCE.

In the cadence the dominant seventh precedes the tonic triad, thus replacing V. The right takes the third position of the chord of the seventh: ; the left hand the fundamental: ; together:

72.

Twenty-sixth Exercise.

(1) Erect dominant chord of the seventh in above position in all keys.

This position is followed in the cadence by the tonic triad, as the latter before followed the Dominant Triad V.

73.



(2) Form this two-chord close in all keys.

In all more complicated cadences the chord of the seventh takes the place of the V (dominant triad).

(3) Form, with the chord of the seventh instead of the dominant triad, and in all keys

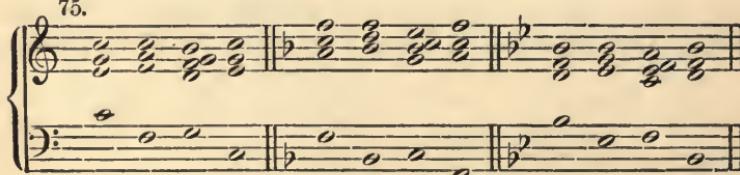
three-chord cadences:

74.



four-chord cadences:

75.



five-chord cadences:

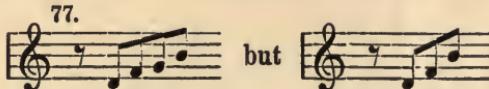
76.

The image displays six staves of musical notation for piano, arranged in two columns of three staves each. Each staff consists of a treble clef, a bass clef, and a staff line. The notation is primarily composed of eighth-note chords, with occasional quarter notes and sixteenth-note patterns. The keys and key signatures change across the staves, illustrating different five-chord cadence progressions. The first staff (top left) starts in G major (no sharps or flats). The second staff (top middle) starts in A major (one sharp). The third staff (top right) starts in B major (two sharps). The fourth staff (bottom left) starts in E major (three sharps). The fifth staff (bottom middle) starts in D major (one sharp). The sixth staff (bottom right) starts in C major (no sharps or flats). The notation is divided into measures by vertical bar lines, and each measure concludes with a double bar line and repeat dots, indicating a repeating pattern.

§ 24.

FIGURATION OF THE CHORD OF THE SEVENTH.

In figuring the cadences the repetition of the fundamental in the chord of the seventh (right hand) is omitted, that the rhythm may be equal, and we therefore play, not:



Twenty-seventh Exercise.

Form as above the figured five-chord cadence in all keys. Example:



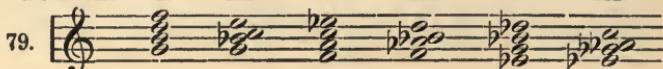
§ 25.

CHORDS OF THE SEVENTH IN CIRCLE OF FOURTHS.

Alternate, while progressing through the Circle of Fourths, between the first and third positions of the chord of the seventh in the right hand:

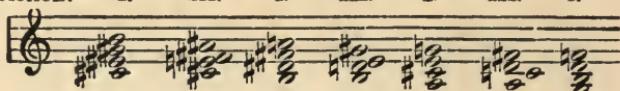
Circle of Fourths: *C-maj. F-maj. B♭-maj. E♭-maj. A♭-maj. D♭-maj.*

Position: I. III. I. III. I. III.



Circle of Fourths: *F♯-maj. B-maj. E-maj. A-maj. D-maj. G-maj. C-maj.*

Position: I. III. I. III. I. III. I.



Twenty-eighth Exercise.

Play above series by heart with the right hand.
The left hand plays the fundamental to each chord.

Play the series with both hands:

80.

The same figured: (See No. 70.)

81.

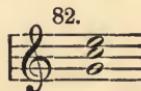
or:

VII. The six and seven-chord Cadences.

§ 26.

CHORD OF THE FOURTH AND SIXTH.

The second inversion (third position) of the tonic triad is called the Chord of the Fourth and Sixth.

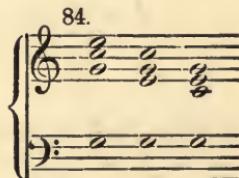


Take this with the right hand, doubling the lowest note with the left:



giving chord of the fourth and sixth in four parts.

This chord retains its significance as chord of the fourth and sixth, when the right hand takes another position of the triad, as long as the bass is the same.



Of these three chords of the fourth and sixth we use the second in cadence, *i. e.* the one having the tonic of the key as highest note.

Twenty-ninth Exercise.

Form the chord of the fourth and sixth as above in all keys.

85.

§ 27.

THE SIX-CHORD CADENCE.

Play the chord of the fourth and sixth given in the foregoing § between the third and fourth chords of the five-chord cadence.

86.

We thus obtain the six-chord cadence.

Thirtieth Exercise.

(1) Form the six-chord cadence in all major keys.
C-major as above. (No. 86.)

87. *G-major.*

D-major.

A-major.

D♭-major.

A musical score for two voices. The top staff is for the soprano voice, and the bottom staff is for the basso continuo. The soprano part consists of eighth-note chords. The basso continuo part consists of eighth-note chords and includes a basso continuo realization with a bassoon line and a cello line. The score is in 2/4 time.

*A*b-major.

E♭-major.

Figure out the six-chord cadence.

88.

A musical score for piano, page 88. The top staff is in treble clef with a tempo of 120 BPM. The bottom staff is in bass clef with a tempo of 100 BPM. The music consists of a series of eighth-note chords in the treble clef staff and quarter notes in the bass clef staff.

A musical score for piano, page 10, showing measures 11 and 12. The score is in A major (three sharps) and common time. The top staff (right hand) has a treble clef and consists of a series of eighth-note patterns. The bottom staff (left hand) has a bass clef and consists of quarter notes. The notes are separated by vertical bar lines.

28.

IN MINOR.

Thirty-first Exercise.

(1) Form in like manner the tonic chord of the fourth and sixth in all minor keys.

89.

89.

(2) Form the six-chord cadence in minor.

90. *c-minor.* *g-minor.*

I VI IV II I I

d-minor.

etc.

I

(3) Figured:

91. c-minor.

g-minor.

REMARK. The brightest pupils, but only these, may be told here, that, instead of the subdominant triad, the chord of the sixth on the subdominant (first inversion of the subordinate triad on the Second) may be played.

92.

Figured:

Figurated:

A musical score for piano, page 10, showing measures 11 and 12. The score is in 2/4 time with a B-flat key signature. The top staff (treble clef) has a series of eighth-note patterns. The bottom staff (bass clef) has sustained notes and a single eighth note.

§ 29.

CHORD OF THE SEVENTH ON THE SECOND DEGREE.

By adding to the subdominant triad (IV) a *third* below, we obtain this chord. Its fundamental is the Second (second degree) of the key.

Thirty-second Exercise.

(I) Form the chord of the seventh on the Second in all major keys.

93.

93. *Music score for 'The Star-Spangled Banner' showing the vocal line and piano accompaniment. The vocal line consists of a single melodic line on a treble clef staff. The piano accompaniment consists of two staves: a treble clef staff for the right hand and a bass clef staff for the left hand. The vocal line starts on C and moves through G, D, A, E, B, F#, and D (double sharp). The piano accompaniment starts on A (double flat), moves through E (double flat), B (flat), F, and C.*

(2) Form the same chord so, that its fundamental is taken an octave lower by the left hand, the right taking only the subdominant triad.

Ab Eb Bb F C

§ 30.

THE SEVEN-CHORD CADENCE.

Introduce the chord of the seventh just explained between the third and fourth chords of the last cadence, *i. e.* between the chords of the subdominant and of the fourth and sixth.

95.

IV II₇ I₄

We thus obtain the seven-chord cadence.

Thirty-third Exercise.

(1) Form the seven-chord cadence in all major keys.

96.

etc.

(2) Figurated.

97.

§ 31.

IN MINOR.

Thirty-fourth Exercise.

(I) Form chord of the seventh on the Second, as above, in minor. Only singly, because their regular succession sounds disagreeably.

98.

(2) Form the seven-chord cadence in minor.

99. *c*-minor.

c-minor.

In forming these chords of the seventh in minor, strike with the right hand, as previously in major, the subdominant chord (IV), then adding with the left the lower third (Second of the key) an octave below.

REMARK. As a subordinate exercise the minor chord of the seventh on the *seventh degree* of the major scale may be taken up here. It is resolved to the tonic triad, and with this resolution exhibits a very clear picture of the key, and the mutual relations of its seven tones.

Without this resolution the chord does not present the major key so clearly, as it may then easily be mistaken for the chord of the seventh on the Second in minor.

VIII. Chords in Diatonic and Chromatic Progression.

§ 32.

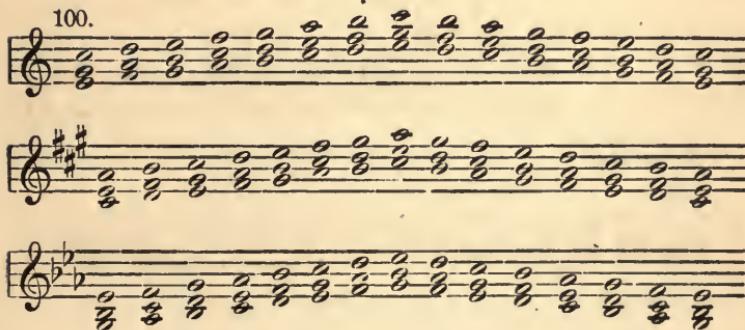
CHORD OF THE SIXTH.

The chord of the sixth  can progress diatonically in all parts, and thus form a scale of chords of the sixth either ascending or descending.

Thirty-fifth Exercise.

Form scales of chords of the sixth, with each hand alone, in all major keys.

100.



We can proceed in like manner with the chord of the sixth and fourth; but this series is far less pleasing in effect, and requires in composition a special harmonic actuation.

Thirty-sixth Exercise.

Chords of the fourth and sixth in diatonic progression.

101.

Here the best opportunity offers for a subordinate exercise—that of practically showing the pupil the nature of the suspension. In C-major let him strike, *before* the highest tone of each chord of the sixth, that of the chord next above, *together with* the two lowest tones.

Variation.

or with tie:

In other keys the signature must be carefully observed.

§ 33.

THE DIMINISHED TRIAD.

The diminished triad may progress chromatically, each part of the same moving by a semitone either ascending or descending.

Thirty-seventh Exercise.

102.

This progression can of course also occur in Figuration:

Both inversions should also be worked out:

First (chord of the Sixth).

In Figuration:

Second (chord of the fourth and sixth).



In Figuration:



§ 34.

DIMINISHED CHORD OF THE SEVENTH.

For a long period this chord has occurred more frequently than any other with the above chromatic progression.

The diminished chord of the seventh consists of a diminished triad with added minor third. It therefore comprises in all *three* minor thirds.

Thirty-eighth Exercise.

(1) Form the diminished chord of the seventh on all degrees of the chromatic scale, with each hand alone.

103.

(2) Practice this succession, till thoroughly fluent, in both Chords and Figuration, first with either hand alone, then with both together. (Incidentally, with figuration in one hand and chords in the other.)

104.

etc.

etc.

etc.

§ 35.

CHROMATIC CHORDS OF THE SIXTH.

These chords, and likewise those of the fourth and sixth, may progress chromatically as above, but with less agreeable effect than the preceding.

(a) *Chord of the Sixth, major triad:*

105.

Three staves of musical notation. The top staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major. The middle staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major. The bottom staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major. Each staff ends with the word "etc."

(b) *Chord of Fourth and Sixth of same:*

106.

Two staves of musical notation. The top staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major. The bottom staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major. Each staff ends with the word "etc."

(c) *Chord of the Sixth, minor triad:*

107.

Two staves of musical notation. The top staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major. The bottom staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major. Each staff ends with the word "etc."

(d) *Chord of Fourth and Sixth, minor triad:*

108.

Two staves of musical notation. The top staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major. The bottom staff shows a treble clef, a key signature of one sharp, and a series of eighth-note chords: G major, A minor, B minor, and C major.



Thirty-ninth Exercise.

Form such progressions.

IX. Modulation.

§ 36.

INTERCONNECTION.

Those chords which stand next each other in the Circle of Fifths or Fourths are termed *interconnected* (related).

Major and minor chords, whose keys have like signatures, are called *relative*.

Fortieth Exercise.

(I) Play major triads, with their relative minor triads, throughout the Circle of Fourths.

109.

Major and minor chords having the same fundamental are called *like-named*. The exercise, to play the like-named triads, has already been given. (Seventh Exercise.)

(2) Pass from a major triad to the like-named minor triad, from this to its relative major triad, which is then to be treated similarly.

Application:

§ 37.

DEFINITION OF MODULATION.

The transition (passing over) to another key is called Modulation.

The series of chords of the seventh in Nos. 79—81 modulates with each progression; *i. e.* each chord of the series belongs to a different key.

Rules for modulation can be presented only in a systematic and methodic course of Harmony. Here all must be left, after a mere passing suggestion, to the talent and inclination of the pupil. More serious endeavors should be based on the exercise of practical harmony.

A Modulation is effected by the introduction and regular resolution of the dominant chord of the seventh belonging to that key, into which we wish to pass.

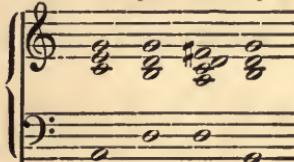
111.
From C-major to G-major.



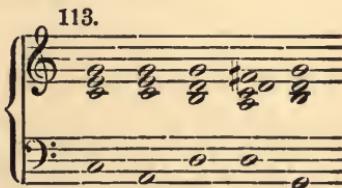
i. e. by the two-chord cadence of the new key. The two-chord cadence forms, as we know, the two last chords (and the most essential part) of all cadences.

Also, the three last chords of the seven-chord cadence may be used for modulation; of course we always mean the cadence of that key, into which we wish to pass.

112.
From C-major to G-major.

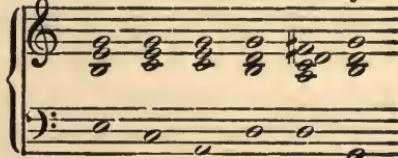


Also, the four last chords:



Also, the five last chords:

114. From e-minor to G-major.



Also, the six last chords:

115. From *A*-major to *C*-major.

Forty-first Exercise.

Modulate by the two-chord cadence from any key into any other.

Here no heed should be given to the progression and leading of the individual parts, unless the pupil's talent fairly demands it.

Should the chord of the seventh in the new key not follow harmoniously upon the first chord, a related triad may be introduced between the two.

116.

Instead of a triad we may introduce a dominant or diminished chord of the seventh, or one on the second degree, whereby the pupil however, from his present standpoint, can not be guided by rules, but exclusively by his ear and taste.

117.

Forty-second Exercise.

Modulate with the two-chord cadence and a chord previously introduced.

§ 38.

UPON THE INDIVIDUALITY

of the pupil it will depend whether, or at what stage, the teacher shall begin with the systematic exercise of practical harmony. Upon this only it also depends, how far the teacher shall let him work out the exercises here presented, and whether any or many may be skipped or no. More especially the exercises in minor are often repugnant to less gifted or zealous pupils, in which case they may be left out. On the other hand, the teacher may pay more attention to the minor keys than has been done above, whenever a pupil exhibits the necessary intelligence and interest. For instance, the resolution of the diminished triad and dominant chord of the seventh may also be carried out in minor; the key of the diminished chord of the seventh may be determined, the chord followed through its inversions, and resolved to major and minor. Peculiarly talented pupils may also attempt to follow up and vary the cadences through inversions.

Still, with such gifted pupils, it is always better to proceed to systematic instruction.

We must again repeat, that the foregoing exercises have no further purpose than to awaken and increase interest in the harmonic foundation of modern music; that they hereby purposely avoid systematic completeness, appealing only to the musical power of perception, to the ear, and aiding the latter, wherever necessary, by helps of a quite external nature. They thus form, in a degree, an

harmonic Kindergarten,
a preliminary course, based simply on empiricism, to the

systematic method of harmony, but quite self-dependent, and independent of the latter, forming a supplement to the practical course of music, which is especially useful in piano-teaching. With most other instruments, the player's own production of the tones is beneficial to the musical perception. Yet they too, although perhaps in a less degree, require this supplementary course, an application of which to other instruments, or in singing-lessons, offers no difficulty.





